

**TOP SECRET**

15 October 1965

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Copy 7NEW-TYPE INTERFEROMETER SITES

## USSR

1. [ ] FIRST REVEALED SIMILAR CONSTRUCTION ACTIVITY  
AT THE TYURATAM AND KAPUSTIN YAR/VLADIMIROVKA MISSILE TEST CENTERS  
WHICH SUBSEQUENT COVERAGE REVEALED TO BE NEW-TYPE INTERFEROMETERS  
UNDER CONSTRUCTION. THERE WAS NO EVIDENCE OF SUCH CONSTRUCTION  
ACTIVITY AT THE KAPUSTIN YAR/VLADIMIROVKA MTC ON [ ]  
[ ] OR AT THE TYURATAM MTC ON [ ]
2. THE INTERFEROMETERS AT THE KAPUSTIN YAR/VLADIMIROVKA MTC AND AT  
THE TYURATAM MTC APPEAR TO BE "L"-SHAPED WITH 2 BASE LEGS, EACH  
APPROXIMATELY 2,000 FT LONG, WHICH INTERSECT AT A RIGHT ANGLE.  
EACH LEG HAS AN ANTENNA PEDESTAL AT THE OUTER END AND A COARSE,  
IN ADDITION TO A FINE ANTENNA MOUNT, NEAR THE POINT OF INTER-  
SECTION, GIVING A TOTAL OF 3 ANTENNA POSITIONS ON EACH LEG. TWO  
OTHER ANTENNA MOUNTS ARE LOCATED OFF-CENTER AT THE INTERSECTION  
POINT. THE CONTROL AREA IS LOCATED APPROXIMATELY 950 FT OFF-CENTER  
OF THE BASE LINE INTERSECTION. WAVEGUIDE RUNS, OR POSSIBLY CABLE  
TRAYS, EXTEND FROM THE CONTROL AREA TO THE BASE LEG TERMINALS AND  
POINT OF INTERSECTION.
4. THIS MISSION REVEALS A NEW-TYPE INTERFEROMETER SITE AT PLESETSK ICBM  
COMPLEX, IMMEDIATELY NORTH OF THE ADMINISTRATION AND HOUSING AREA.

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THIS IS THE THIRD IDENTIFICATION OF THE NEW-TYPE INTERFEROMETER AND THE FIRST OBSERVED AT A DEPLOYED OPERATIONAL ICBM COMPLEX. THE INTERFEROMETER, IN THE VERY EARLY STAGES OF CONSTRUCTION, IS LAID OUT IN AN "L"-SHAPE AND, WHEN COMPLETE, WILL HAVE 2 BASE LEGS APPROXIMATELY 2,150 FT IN LENGTH, [REDACTED]

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[REDACTED] WHEN COMPLETE THE SYSTEM WILL INCLUDE AT LEAST 7 ANTENNAS ALONG THE BASE LEGS, 2 ADDITIONAL ANTENNAS OFF-SET FROM THE CENTRAL ANTENNA, A LARGE CONTROL BUNKER CENTRALLY LOCATED APPROXIMATELY 800 FT SOUTH OF THE CENTRAL ANTENNA POSITION, AND 2 CABLE CONDUITS EXTENDING OUT FROM THE CONTROL BUNKER TO THE TERMINAL ANTENNA POSITIONS. THE SITE WAS NOT PRESENT ON KH [REDACTED]

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5. A RADIO-FREQUENCY INTERFEROMETER IS A DEVICE USED TO TRACK AN AIRCRAFT, MISSILE, OR SATELLITE BY PHASE COMPARISON TECHNIQUES - THAT IS, BY DETERMINING THE CHANGING ANGLE OF A RADIO SIGNAL FROM THE TARGET AS IT PASSES OVERHEAD.

THERE ARE NUMEROUS VARIATIONS OF INTERFEROMETERS DEPLOYED BOTH IN THE U.S. AND U.S.S.R. THE INTERFEROMETERS AT THE TYURATAM MTC, KAPUSTIN YAR/VLADIMIROVKA MTC, AND PLESETSK ICBM COMPLEX ARE THE NEWEST TYPE THUS FAR IDENTIFIED IN THE U.S.S.R.

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PREPARED BY: CSD/Research Branch

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## NEW-TYPE INTERFEROMETER SITES USSR

INTERFEROMETER SITE U/C  
TYURATAM  
MISSILE TEST CENTER  
45-42N 63-18E

CENTRAL ANTENNA  
CABLE CONDUIT  
CONTROL BUNKER  
TERMINAL ANTENNA

20X ENLARGEMENT

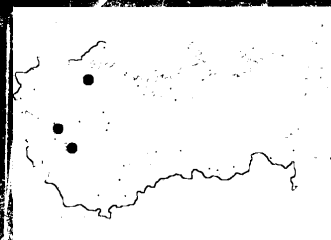
INTERFEROMETER SITE  
KAPUSTIN YAR/VLADIMIROVKA  
MISSILE TEST CENTER  
48-38N 44-46E

CENTRAL ANTENNA  
CABLE CONDUIT  
CONTROL BUNKER

20X ENLARGEMENT

INTERFEROMETER SITE U/C  
PLESETSK ICBM COMPLEX  
62-46 40-21E

CENTRAL  
ANTENNA POSITION  
CONTROL BUNKER  
CABLE CONDUIT  
TERMINAL  
ANTENNA POSITION



20X ENLARGEMENT

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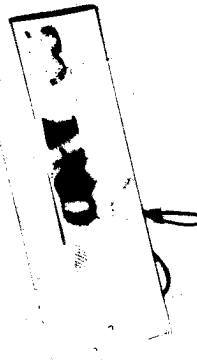
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